IN THE CLAIMS:

1-18. (Canceled)

19. (Currently Amended): [[The]] An apparatus ~~of claim 18~~, in a first storage controller, comprising:

a host adapter that provides a connection to a host;

a processor;

a first memory;

a first memory controller that controls access to the first memory;

a drive adapter that provides a connection to a storage device;

a first switch that connects the host adapter, the processor, the first memory controller, and the drive adapter; and

a switch-to-switch path that connects the first switch to a second switch on a second storage controller,

wherein the host adapter receives a read request for a data block; and

wherein the processor allocates a memory buffer for the data block from a memory pool that includes the first memory on the first storage controller and a second memory on the second storage controller, wherein the memory buffer resides in the second memory; retrieves the data block from a storage device; and caches the data block in the memory buffer via the switch-to-switch path.

20. (Original): The apparatus of claim 19, wherein the processor retrieves the data block from the storage device using the drive adapter via the first switch.

21. (Previously Presented): The apparatus of claim 19, wherein the processor retrieves the data block from the storage device using a drive adapter on the second storage controller via the switch-to-switch path.

22. (Currently Amended): [[The]] An apparatus ~~of claim 18~~, in a first storage controller, comprising:

a host adapter that provides a connection to a host;

a processor;

a first memory;

a first memory controller that controls access to the first memory;

a drive adapter that provides a connection to a storage device;

a first switch that connects the host adapter, the processor, the first memory controller, and the drive adapter; and

a switch-to-switch path that connects the first switch to a second switch on a second storage controller,

wherein the host adapter receives a read request for a data block; and

wherein the processor retrieves the data block from a memory pool that includes the first memory on the first storage controller and a second memory on the second storage controller, wherein the data block resides in the second memory.

23. (Currently Amended): [[The]] An apparatus ~~of claim 18~~, in a first storage controller, comprising:

a host adapter that provides a connection to a host;

a processor;

a first memory;

a first memory controller that controls access to the first memory;

a drive adapter that provides a connection to a storage device;

a first switch that connects the host adapter, the processor, the first memory controller, and the drive adapter; and

a switch-to-switch path that connects the first switch to a second switch on a second storage controller,

wherein the host adapter receives a write request for a data block; and

wherein the processor allocates a primary data buffer for the data block and a mirror data buffer for the data block, wherein the primary data buffer resides on one of the first storage controller and the second storage controller and the mirror data buffer resides on the other of the first storage controller and the second storage controller;

wherein the processor stores write data for the data block in the primary data buffer; and wherein the processor mirrors the write data in the mirror data buffer.

24. (Previously Presented): The apparatus of claim 23, wherein the primary data buffer resides on the second storage controller and the processor stores the write data in the primary data buffer via the switch-to-switch path.

25. (Previously Presented): The apparatus of claim 23, wherein the mirror data buffer resides on the second storage controller and the processor stores the write data in the mirror data buffer via the switch-to-switch path.

26. (Original): The apparatus of claim 23, wherein the processor writes the write data to a storage device using the drive adapter via the first switch.

27. (Previously Presented): The apparatus of claim 23, wherein the processor writes the write data to a storage device using a drive adapter on the second storage controller via the switch-to-switch path.